

## ABSTRACT

A flashloader having a standard module for receiving programming instructions and an application program via a communications port of a vehicle controller, where the flashloader further provides an MCU module for writing the received application program to reprogrammable memory within the vehicle controller, and an ECU module  
5 for determining whether a valid application program has been stored in the reprogrammable memory. Upon detection of a valid application program a microprocessor of the vehicle controller executes instructions from the reprogrammable memory and upon detection of an invalid application program the microprocessor continues to execute instructions from the bootloader.